



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/810,932	03/26/2004	Yao-Chin Lee	252011-2130	1909
47390	7590	02/20/2007	EXAMINER	
THOMAS, KAYDEN, HOSTEMEYER & RISLEY LLP 100 GALLERIA PARKWAY SUITE 1750 ATLANTA, GA 30339			PRAKASAM, RAMYA G	
		ART UNIT	PAPER NUMBER	
		3651		
SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE		
3 MONTHS	02/20/2007	PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/810,932	LEE ET AL.
	Examiner	Art Unit
	Ramya G. Prakasam	3651

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on 23 November 2006.
- 2a) This action is **FINAL**.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-20 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) Notice of Informal Patent Application
- 6) Other: \_\_\_\_\_.

#### DETAILED ACTION

1. The amendment filed on 11/23/2006 has been entered.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior office action.

#### *Claim Rejections - 35 USC § 102*

1. Claims 1, 3-9, 11-18 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Okabe (U.S. Patent No. 6,535,778).

Okabe discloses a tool stocking and sorting system (See Figures 1-9), comprising:

- First tool storage storing a first toll currently in use (See Column 2, lines 44-52 and Figure 9);
- Second tool storage storing a second tool not currently in use (See Column 2, lines 44-52 and Figure 9);
- Third tool storage serving as an outlet for a third tool not in use (See Column 2, lines 44-52 and Figure 9); and,
- A host system (11) adapted to re-locate the first, second, and third tools among the first, second, and third storage as a function of demand data pertaining to a product corresponding to the respective tool (See Column 8, lines 32-34).
- Wherein the demand data is order or order prediction data (See Column 2, lines 44-50).
- Wherein the host system calculates a first idle time, and resets the first idle time when demand data of the product corresponding to the first tool is received (See Column 11, lines 10-15).

- Wherein the host system determines a first time limit, and issues a first transfer command to move the first tool from first tool storage to second tool storage when the first idle time exceeds the first time limit (See Column 8, lines 5-9).
- Wherein the host system issues a first return command to move the second tool from second tool storage to first tool storage when demand data of the product corresponding to the second tool is received (See Column 2, lines 44-52).
- Wherein the host system determines a second time limit, calculates a second idle time, and issues a second transfer command to move the second tool from second tool storage to third tool storage when the second idle time exceeds the second time limit (See Column 8, lines 5-9).
- Wherein the host system issues a second return command to move the third tool from third tool storage to first tool storage when demand data of the product corresponding to the third tool is received (See Column 2, lines 44-52).

Wiesler further discloses a tool stocking and sorting method, comprising:

- Providing first, second and third tool storage storing first, second, and third tools respectively (See Figure 9) and
- Relocating the first, second, and third tools among the first, second and third tool storage as a function of demand data pertaining to a product corresponding to the respective tool (See Column 2, lines 44-52).
- Wherein the demand data is order or order prediction data (See Column 2, lines 44-50).
- Determining a first time limit (See Column 8, lines 5-9)

- Calculating a first idle time of the first tool, and resetting the first idle time when demand data of the product corresponding to the first tool is received (See Column 11, lines 10-15).
- Issuing a first transfer command to move the first tool from first tool storage to second tool storage when the first idle time exceeds the first time limit (See Column 7, lines 1-20).
- Determining a second time limit (See Column 8, lines 5-9);
- Calculating a second idle time, and resetting the second idle time when demand data of the product corresponding to the second tool is received (See Column 11, lines 10-15).
- Issuing a second transfer command to move the second tool from second tool storage to third tool storage when the second idle time exceeds the second time limit (See Column 7, lines 1-20).
- Issuing a first return command to return the second tool from second tool storage to first tool storage when demand data of the product corresponding to the second tool is received (See Column 2, lines 44-52).
- Issuing a second return command to return the third tool from third tool storage to first tool storage when demand data of the product corresponding to the third tool is received (See Column 2, lines 44-52).

Okabe also discloses a computer readable storage medium for storing a computer program (See Column 3, lines 54-62) providing a tool management method controlling storing and sorting of tools in a manufacturing system, the method comprising:

- Receiving first and second time limits (See Column 8, lines 5-9);
- Calculating a first idle time and resetting the first idle time when demand data of a product corresponding to a first tool is received (See Column 11, lines 10-15);
- Issuing a first transfer command to move the first tool from first tool storage to second tool storage when the first idle time exceed the first time limit (See Column 7, lines 1-20);
- Calculating a second idle time and resetting the second idle time when demand data of the product corresponding to a second tool is received (See Column 11, lines 10-15); and
- Issuing a second transfer command to move the second tool from second tool storage to third tool storage when the second idle time exceeds the second time limit.
- Issuing a first return command to return the second tool from second tool storage to first tool storage when demand data of the product corresponding to the second tool is received (See Column 7, lines 1-20).
- Wherein the method further comprises issuing a second return command to return the third tool from third tool storage to second tool storage when demand data of the product corresponding to the third tool is received (See Column 2, lines 44-52).
- Wherein the demand data is order or order prediction data (See Column 2, lines 44-50).

***Claim Rejections - 35 USC § 103***

2. Claims 2, 10, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okabe in view of Wiesler (U.S. Patent Application Publication # 2001/0047222).

Okabe discloses all claimed limitations, except for a tool stocking and sorting method wherein the tool is a reticle. Wiesler discloses the use of a reticle management system for the purpose of efficiently and cost effectively manufacturing integrated circuits (See page 1, paragraphs 0002 and 0004). It would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify Okabe by utilizing a tool stocking and sorting method wherein the tool is a reticle for the purpose of efficiently and cost effectively manufacturing integrated circuits.

***Response to Arguments***

3. Applicant's arguments filed on 1//23/2006 have been fully considered but they are not persuasive.
4. With regards to applicant's argument that there is no mention of any tool storage In Okabe, Okabe discloses a plurality of lots, each comprising a *hold stocker* for holding each lot in a standby state. Each of the lots are held in the hold stocker, which acts as a tool storage in that it holds the lots until it is ready for processing. It is clear from this language that Okabe does in fact disclose a tool storage which serve as outlets for tools.
5. With regards to applicant's argument that Okabe fails to disclose a host system adapted to re-locate the first, second and third tools among the first, second and third storages", the FA computer as disclosed in Okabe is a host computer that controls the factory, in particular the lot treatment flow (i.e. the movement of the lots between the storages) (See Column 8, lines 38-48). The host system, therefore, is in fact adapted to re-locate the tools as a function of demand data (i.e. time and product type).

*Conclusion*

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ramya G. Prakasam whose telephone number is (571) 272-6011. The examiner can normally be reached on Monday - Thursday, 8:30am-7pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gene Crawford can be reached on (571) 272-6911. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3651

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

2/15/2007

RGP

  
GENE O. CRAWFORD  
SUPERVISORY PATENT EXAMINER